

# Becoming Network-Wise

*Schools can do a far better job of preparing students for their connected futures online.*

**Will Richardson**

**L**et me tell you how our kids learn about Facebook and MySpace," the high school principal said with a wry grin. I'd just finished up a presentation on the potentials and pitfalls of online social networks, and I could tell he was looking to offer a helpful if somewhat sarcastic dose of reality. "They get a great lesson," he said, "when I pull them into my office and give them a good tongue-lashing about the stuff they're putting up on their sites." I chuckled, and so did most in the audience.

"So if that's your 'curriculum' on the topic of responsible online conduct," I asked, smiling, "then whose fault is all that not-so-great-stuff the kids are putting up there?"

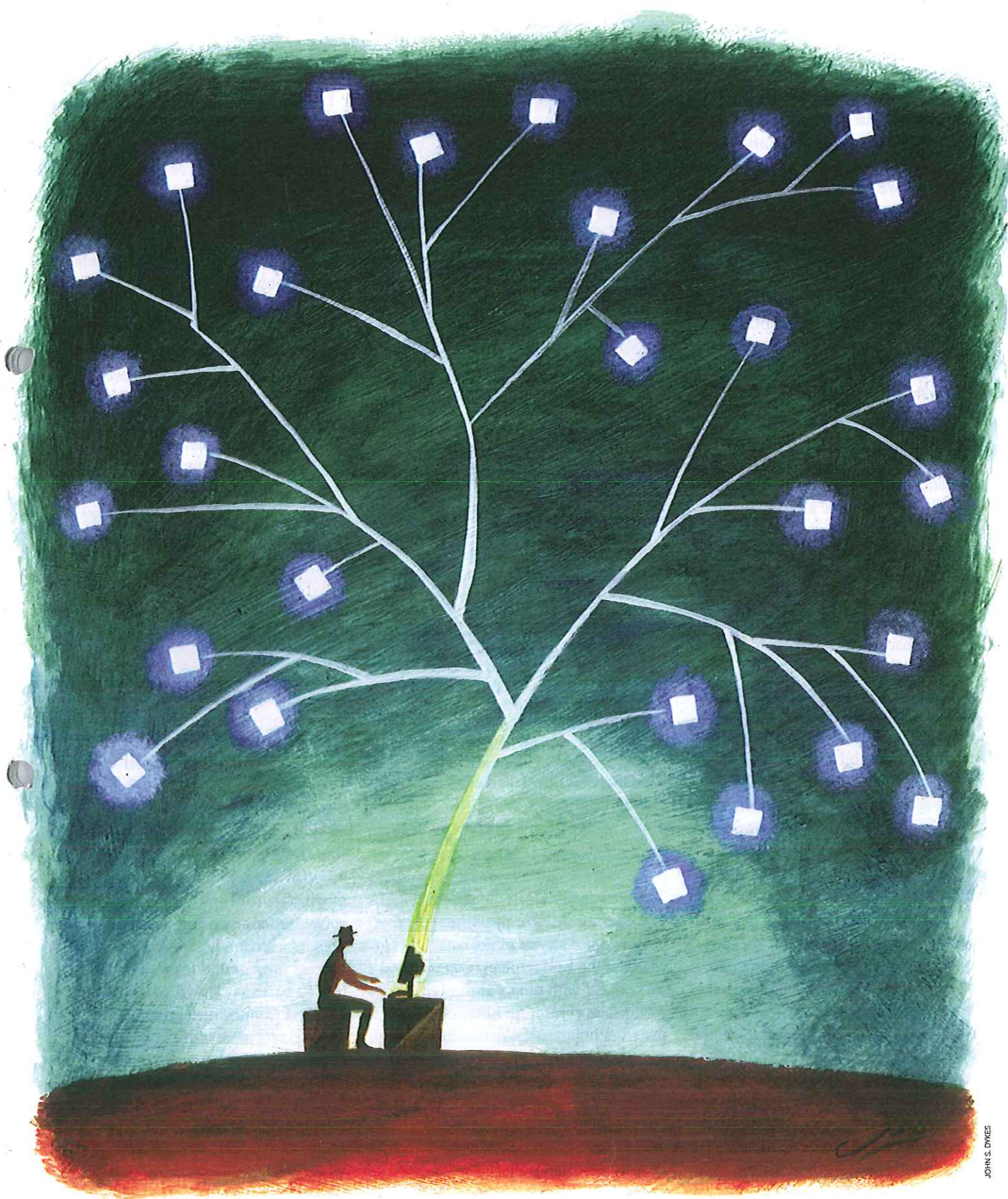
He thought for a second, then smiled broadly. "The parents!" he exclaimed, and we all laughed at his deft deflection of the question.

But should we be laughing? The explosion of connective online technologies—such as blogs, wikis, and the social networking sites so many students love to use (and, in some cases, abuse)—have given many educators pause as we try to understand and navigate a fast-changing, much more public, collaborative landscape on the Web. The challenges of keeping up with students as they create and publish in ever-increasing numbers are daunting, especially when most educators have little context for those activities in their own lives. But the fact is that students continue to explore networking online, few of them are being taught how to leverage its potential and benefit from the deep learning that can ensue.

## **Their Networked Futures**

Leverage these connections they must, for the growing consensus is that much of our students' learning lives will be spent interacting in online, virtual networks, forming groups with others on the basis of their passions and their need to learn, all the while making complex decisions about whom to connect to, how much information to share, and how best to achieve both collective and individual goals. In the process, students will need to build their own curriculums, create their own projects, and assess their own products and their contribution in creating them. In short, they must be self-directed, self-motivated, lifelong learners who are network-literate in their







creation and participation in these spaces.

This is no small shift, to be sure, from traditional classroom spaces where the curriculum is fixed before the fact and parceled out as the year progresses in neat, linear pieces; where standardized tests require little if any self-reflection or interaction with others; and where work is seldom shared publicly or created for the public good.

It's a shift that challenges the relevance of the traditional classroom in some fundamental ways. Learning is no longer primarily fixed in time and space; it can happen anytime and anywhere that we are connected—in a virtual, asynchronous classroom, for example, with self-motivated and self-directed people who want to learn with us. In that context, it forces us to rethink our physical teaching and learning spaces and our roles in students' lives.

Regardless of the level of discomfort that these "epochal" changes (Shirky, 2008, p. 17) create for teachers, administrators, and parents alike, *not* addressing these shifts by attempting to simply filter them away or ignore their reality is no longer an option. Students will be—and to some extent already are—living in a world of online interactions for which they currently have few learning contexts or models. Like it or not, we must begin to prepare them for their connected futures online. To do that, we must be willing to embrace these new technologies in our own practice and add an important expectation for learning to our curriculums and classrooms—namely, that by graduation, students will be able to create, navigate, and grow their own personal learning networks in safe, effective, and ethical ways.



Stanford professor Howard Rheingold, a blogger and author of *Smart Mobs* (Perseus, 2002), put it this way:

Learning to use online forums, be they social network services like MySpace and Facebook, blogs, or wikis, is not a sexily contemporary add-on to the curriculum—it's an essential part of the literacy today's youth require for the world they inhabit. . . . The way today's students will do science, politics, journalism, and business next year and a decade from now will be shaped by the skills they acquire in using social media and by the knowledge they gain of the important issues of privacy, identity, community, and the role of citizen media in democracy. (2008)

### The Future Is Here

Considering they barely existed just five years ago, online networks have quickly changed the landscape in terms of how we connect with others around the world. The current numbers of people participating in social networks are staggering: 250 million on MySpace, 125 million on Facebook, and hundreds of millions more on such sites as LinkedIn, LiveJournal, and LibraryThing ("List of Social Networking Websites," n.d.). As we add on to the already 1.5 billion

people online, those numbers continue to explode. More significant for educators is students' intensive participation in these social networks.

According to a National School Boards Association study (2007), more than 75 percent of U.S. students with online access have either a MySpace or a Facebook account. These spaces are an important part of students' lives, and their attraction is not going away anytime soon.

But missing from the usual conversation about social networking are the many millions of those who connect, collaborate, and learn with one another outside the structure of the "typical" social Web site through their interaction on blogs, Twitter, Flickr, Delicious, and many other sites. To be successful in these interactions, which are more representative of the self-directed learning opportunities we now have, we must exhibit an increasingly complex set of skills that apply not only to how we engage with information but also to how we engage with people online.

### The Skills Students Need

In these self-made, online, networked classrooms, traditional reading and writing literacies are no less important. In fact, we must be willing to expand the scope of literacy in a world where much of what we read is unedited in the conventional sense and where a precursor to building networks is a willingness to write and publish online using a variety of media. Even the National Council of Teachers of English (NCTE) recognizes the changing shape of traditional literacy, calling it "malleable" and suggesting that 21st-century readers and writers should be able to not only use technologies effectively but also "build relationships with others to pose and solve problems

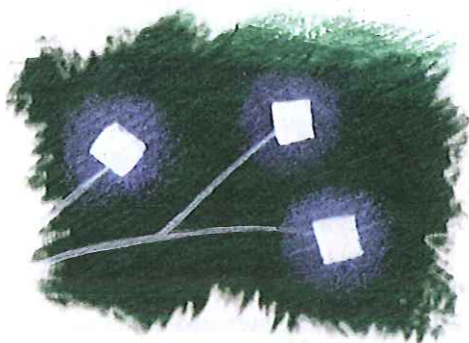


collaboratively and cross-culturally” and “design and share information for global communities to meet a variety of purposes” (NCTE, n.d.).

So how do we do that?

### Handling Hypertext

From a reading standpoint, we need to acclimate students to hypertext environments early on and foster an ability to synthesize relevant bits of information from many diverse sources. We must help them become comfortable reading electronically distributed texts and conversations that look and feel little like the linear, page-by-page reading that we do in the paper world.



An important way to begin that work is by teaching students (and ourselves) to use RSS (Really Simple Syndication) feeds to subscribe to content creators who consistently publish relevant and interesting information. In addition to using traditional texts to do research, students could use RSS feeds to create a consistent stream of news stories, blog posts, videos, and photos related to a given topic coming to their desktops or cell phones, which they can access at a moment's notice. Their task then becomes to filter this stream for the most relevant and accurate items, using critical-reading skills to follow links and dive more deeply into the information.

For instance, students studying the effects of global warming could use RSS feeds to subscribe to stories about the

topic from the *New York Times* and compare those stories with ones they get in similar feeds from the *Times of India* and *China Daily*. In addition, they could use RSS feeds to scour the blogosphere to identify expert voices.

### Critically Reading Information

Although having effective skills for finding and collecting information is imperative, we also need to make sure that students can read as highly trained editors read, looking for truth in both the text and the author. If the well-chronicled example of the Pacific Northwest Tree Octopus site is any example (see <http://zapatopi.net/treeoctopus>), we

ences—and is referenced by—credible sites. And they must be able to analyze the level of writing, the tenor of the comments, and the authors' motives, commercial or otherwise, to gauge the veracity and relevance of the information.

### Critically Reading People

Reading people is equally if not more challenging because in the practice of network building, students must critically evaluate potential nodes in their networks. It's not enough simply to find someone who shares their passion. To find good teachers, students must make a habit of asking such questions as, Who

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have some work to do in this area.

University of Connecticut professor Donald Leu showed this fictitious site to a group of 25 middle school students, none of whom could discern that the site was a hoax, despite the ludicrous premise of this endangered species struggling through life climbing pine trees to avoid capture and being sold as women's headwear. Twenty-four of the students, in fact, labeled it “very credible.”

Students must be able to find out who owns a particular Web site; they can do this by using a research service such as Whois.net to access the registration information. They must be able to assess its authority by examining the incoming and outgoing links from and to other sites on the Web to ensure it refer-

is this person? What are her traditional and nontraditional credentials? What communities or networks is he a part of? What is the level of her contribution? and What is his professional reputation? Students must be able to answer these questions satisfactorily by knowing how to search deeply online, not just in Google, but in databases and content repositories, such as ProQuest or EBSCO Host.

So, for instance, if a student who is researching global warming happens on the blog Environmental Economics ([www.env-econ.net](http://www.env-econ.net)), he or she must be able to not only consider the information provided about the authors, but also search beyond the blog for more information, reading into the archives, checking the frequency of postings and



the tone of the comments left by readers, all the while attempting to measure the author's veracity and contribution. The student must be able to make sound editorial decisions in terms of whether the blog and its authors are trustworthy sources of knowledge and learning.

### *Writing for an Audience*

We must guide students in sharing their real-work efforts with worldwide audiences, helping them understand the efficiencies and ethics of publishing in meaningful ways. Sharing that work is the first step to becoming "findable"

foster their own connections around the topics that they are passionate about, writing and publishing under their own names when they are ready. All the while, we should attempt to model these behaviors in our own learning, sparking conversations about writing online in every grade and discipline.

### *Writing in Multiple Modes*

Students should be writing in digital environments in different modes. To provide instant content, online users can add links—not just to words but to photos, digital stories, and videos. Tools

of our online practice. For instance, the days of saving great Web sites to our browser as bookmarks or favorites have passed. Today, we share those great online finds using social bookmarking sites like Delicious.com or Diigo.com, where others can find them and, subsequently, find us. In fact, by using RSS feeds, others can "subscribe" to our bookmarks, finding out what we are reading and, with any luck, enriching their own learning in the process.

Case in point: As a friend of mine began to collect bookmarks about an upcoming trip to New Zealand, someone from New Zealand who tracked those bookmarks saw them coming through her RSS reader and ended up having a long conversation with my friend on Skype regarding the best places to stay and visit. (Now that's connection!)

And, as with just about everything else we read or write, we assign our own organizational schemes or *folksonomies* by using keywords or tags that help us (and others) track the most interesting, relevant content out there. So, for instance, if you're interested in the articles and artifacts that contribute to this discussion, you can follow all the bookmarks I've tagged with "network\_literacy" at [http://delicious.com/willrich/network\\_literacy](http://delicious.com/willrich/network_literacy). (As of the writing of this article, I'm at 116 and counting.)

### *Engaging Diverse Voices*

Creating effective networks is more complex than simply organizing a group of like-minded learners with heightened traditional literacies, however. According to Stephen Downes (2007), a senior research officer with the Institute for Information Technology at Canada's National Research Council, personal learning networks must be diverse, open, autonomous, and connected. Diversity in a learning network is crucial because without it we become stuck in an "echo chamber" of like-minded voices.

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online by others who share our passions. (For more on becoming "findable," see my article "Footprints in the Digital Age" in the November 2008 issue of *Educational Leadership*.) But although this is a positive consequence of the changing online landscape, most schools currently don't want their students to be found at all, an attitude that potentially does more harm than good.

Teaching students to contribute and collaborate online in ways that are both safe and appropriate requires instruction and modeling, not simply crossing our fingers and hoping for the best when they go home and do it on their own. With younger students, we can create opportunities to share with classmates or with vetted classrooms from outside the school walls. In the context of those connections, we can teach students about privacy, safety, copyright, plagiarism, and the ethics of online communities. As they get older, we can help them

like VoiceThread (<http://voicethread.com>) enable audio and video interactions; people can comment on an image, document, or video through speech, text, audio files, or video. Flickr ([www.flickr.com](http://www.flickr.com)), the online photo-sharing site, enables users to add annotations and links directly to pictures, creating connected stories and conversations. In fact, as the word implies, the *link* makes connections happen and networks grow. If we continue to simply pass paper back and forth in our classrooms, we are not preparing students for the world they are entering.

### *Organized Sharing*

The work of building personal learning networks is more than just reading, writing, and editing, however. It requires being able to capture, organize, and potentially remix and redistribute the best, most relevant information that we find—and that means rethinking parts



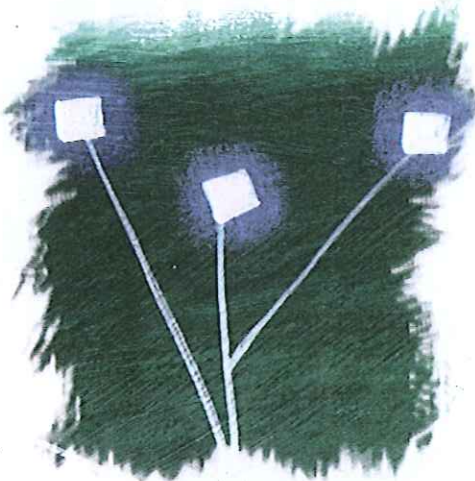
We must teach students to seek out “critical friends” and voices of dissent who will respectfully challenge their thinking. We do that by seeking out the best, most vibrant communities and conversations; by being willing to engage and push one another’s thinking in civil ways; and by modeling for students how we handle the back and forth in our own learning conversations. Most important, this should happen for students in the context of their passions, where the debate and the engagement have real meaning and consequences for their learning.

### Thin Walls

How can we best deliver these literacies in our classrooms? The reality is that we shouldn’t be teaching them as a unit tucked somewhere in the curriculum under the guise of “information literacy” at a time that we think students might be “ready” to acquire these skills. Instead, if we sincerely want to prepare students to read, write, and edit their way through complex online networks, we need to make these literacies part of the way we do business as educator/learners.

According to Clarence Fisher, a teacher in Snow Lake, Manitoba, who regularly connects his students with other teachers and learners around the world, we have to begin thinking of our classrooms as having “thin walls” (<http://thinwalls.edublogs.org/about>). We need to regularly break through the bricks, starting at the earliest ages.

In elementary school, for instance, we can have young readers interview authors using Skype or have them create or edit posts at Wikipedia, making sure to follow along with the conversations and the other edits that ensue. As the students get older, we can use our own networks to connect our classrooms to other classrooms to co-create and collaborate on projects and



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content, and we can give those works real, global audiences by publishing them online. And before the students leave us, we can let them design and deliver their own curriculums built around the passions that they want to pursue, showing us their network-building prowess in the process.

We should help them aspire to the work that 18-year-old Ethan Bodnar, for instance, has shared over the past two years around his passion for art and social media (<http://ethanbodnar.com>). Ethan’s blog is part portfolio, part notebook, part idea archive—and a testament to what’s possible when we let kids create and publish to

worldwide audiences.

In the end, if we fail to get our collective educator brains around these shifts, if we continue to think that punishing students’ uses of these networks is the best way of teaching them what they need to know to survive in a globally connected, transparent world, then we are not doing everything we can to prepare them for their learning futures. And that’s no laughing matter. **EL**

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